UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,995	01/14/2004	William H. Fulton	102434-200	3727

27267 7590 08/04/2006

WIGGIN AND DANA LLP
ATTENTION: PATENT DOCKETING
ONE CENTURY TOWER, P.O. BOX 1832
NEW HAVEN, CT 06508-1832

EXAMINER	
BALSIS, SHAY L	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/756,995	FULTON ET AL.	
	Examiner	Art Unit	
	Shay L. Balsis	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5-15-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The amendment filed 5/15/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the cover comprises a safety recess.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Newly added claim 7 includes limitation for a cover having a safety recess. This limitation of a safety recess was not previously disclosed in the specification or in the drawings. The specification on discloses using a cover on the cartridge, not a cover with a safety recess. Additionally, the drawings do not clearly show a safety recess on the cover nor can it be rationalized that the cover shown in figure 3B would have a safety recess.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is claiming the apparatus to clean probe pin and not the combination of the apparatus and the probe pins. While the preamble states that the device is for cleaning probe pins, this is an intended use limitation. Therefore, the limitation in the claim regarding the depth that the probe pin will penetrate is indefinite since the probe pin is not positively recited in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahiko (JP 2002177895).

With regards to claim 1, Masahiko teaches a cleaning device comprising a first holding plate (48) for holding and securing probes assemblies. The cleaning cartridge (24) having an upper surface, a chamber (24), a cleaning solution and an absorbent pad (60). The absorbent pad is located within the chamber and the pad is saturated with cleaning solution (NaOH, ZnCl2, figure 3). There is a means for securing and aligning (42, 44, 46, 54, 56) the cleaning cartridge is

proximity to the probe head assembly. The cleaning cartridge is configured such that the upper surface of the cleaning cartridge and the top surface of the absorbent pad are at a predetermined distance to one another. The predetermined distance defines a depth that the probe pins penetrate the pad when a surface of the probe head assembly is brought into contact with the upper surface of the cleaning cartridge. In the instant case, the reference does not clearly show or disclose whether or not the top of the pad and the upper surface of the cartridge are at the same height. It appears from figure 2, that there is a small distance between the upper surface of the cartridge and the top of the absorbent pad, however this is not discussed in the specification. Whether there is a distance between the two or not, the claim language does not exclude the distance from being zero. Therefore, when the first plate is moved vertically into position onto the upper surface of the cartridge, the probe assembly may (if the distance is equal to zero) or may not (the distance is greater than zero) contact the absorbent pad. Both of these interpretations read on the limitations of the claim.

With regards to claim 2, the first holding plate (48) is affixed to the second holding plate (44, 54) so as to be rotated into alignment with the second holding plate (the second holding plate comprises a screw-type element, which is rotated to ensure a connection between the first and second plates since the screw keeps the two plates affixed together).

With regards to claim 3, the first and second holding plates and the cleaning cartridge are made from a chemically inert material since no chemical reaction occurs between the elements.

With regards to claim 8, the means for securing and aligning includes a clamp (54, 56) extending from the first holding plate (48) and a second holding plate (44, 54) includes a hole for receiving the clamp (as clamp is turned and the screw portion of the clamp extends through the

hole in the second plate (54) causing the first holding plate to be moved vertically) (figure 1 and 2).

With regards to claim 9, the means for securing and aligning includes a guide (46) extending from the first holding plate (48) and a second holding plate (44) includes a slot for receiving the guide (46 fits within a slot on 44, the guide and the slot allow for vertical movement of the first plate) (figure 1 and 2).

Claims 1, 2, 3, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Baker (USPN 5537706).

With regards to claim 1, Baker teaches a cleaning device comprising a first holding plate (20) for holding and securing disks. The cleaning cartridge (40) having an upper surface, a chamber (40), a cleaning solution (130) and an absorbent pad (120). The absorbent pad is located within the chamber and the pad is saturated with cleaning solution. There is a means for securing and aligning (hinge) the cleaning cartridge in proximity to the disks. The cleaning cartridge is configured such that the upper surface of the cleaning cartridge and the top surface of the absorbent pad are at a predetermined distance to one another. The predetermined distance defines a depth that the probe pins (if used for the intended use) penetrate the pad when a surface of the probe head assembly is brought into contact with the upper surface of the cleaning cartridge. In the instant case, the reference does not clearly show or disclose what the predetermined distance is. The distance could be zero or greater than zero. The top of the pad may be located at a position above the upper surface of the cartridge, below the upper surface or the top of the pad may be flush with the upper surface of the cartridge. Whatever the distance is between the two parts, the claim language does not exclude any of the possibilities listed above.

With regards to claim 2, the first holding plate (20) is affixed to the second holding plate (32) so as to be rotated into alignment with the second holding plate (the plates are hinged together).

With regards to claim 3, the first and second holding plates and the cleaning cartridge are made from a chemically inert material since no chemical reaction occurs between the elements.

With regards to claim 8, the means for securing and aligning (the most common hinges have 3 parts: a pin and two hinge plates with protrusions and recesses) provide openings includes a clamp (protrusions on one of the hinge plates attached to rear of first plate) extending from the first holding plate (20) and a second holding plate (32) includes a hole for receiving the clamp (recesses on other hinge plate attached to the bottom of second plate).

With regards to claim 9, the means for securing and aligning (the most common hinges have 3 parts: a pin and two hinge plates with protrusions and recesses) includes a guide ((protrusions on one of the hinge plates attached to rear of first plate)) extending from the first holding plate (20) and a second holding plate (32) includes a slot for receiving the guide ((recesses on other hinge plate attached to the bottom of second plate).

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (USPN 6199238).

With regards to claim 1, Huang teaches a cleaning device comprising a first holding plate (50) for holding and securing disks. The cleaning cartridge (621) having an upper surface, a chamber (622), a cleaning solution (col. 2, lines 64-67 and col. 3, liens 1-13) and an absorbent pad (630). The absorbent pad is located within the chamber and the pad is saturated with cleaning solution. There is a means for securing and aligning (262) the cleaning cartridge in

proximity to the disks. The cleaning cartridge is configured such that the upper surface of the cleaning cartridge and the top surface of the absorbent pad are at a predetermined distance to one another. The predetermined distance defines a depth that the probe pins (if used for the intended use) penetrate the pad when a surface of the probe head assembly is brought into contact with the upper surface of the cleaning cartridge. In the instant case, the reference does not clearly show or disclose what the predetermined distance is. The distance could be zero or greater than zero. The top of the pad may be located at a position above the upper surface of the cartridge, below the upper surface or the top of the pad may be flush with the upper surface of the cartridge. Whatever the distance is between the two parts, the claim language does not exclude any of the possibilities listed above.

With regards to claim 5, there is a cover (21) that is removable and reusable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiko or Baker as applied to claim 3 above.

Masahiko or Baker teach all the essential elements of the claimed invention however fails to teach that the chemically inert material used is polyvinylchloride. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polyvinylchloride for the first and second holding plates as well as the cleaning cartridge, since it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin, 125 USPQ 416.* Additionally, polyvinylchloride would have been a good material to use since it has a high strength, dimensional stability and can be easily machined, heat formed, welded or solvent cemented (San Diego Plastics).

Claim 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiko as applied to claim 1 above over DeForest et al. (USPN 5240339).

Masahiko teaches all the essential elements of the claim however fail to teach that the cleaning cartridge includes a removable and reusable cover (claim 5) or a cover with a safety recess (claim 7). DeForest teaches a fluid saturated sponge (22) applicator with a cover (32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Masahiko so that the absorbent pad and cleaning cartridge comprises a cover as taught by DeForest so that when the pad is not in use, the cover can be attached to the cartridge and the absorbent pad will not dry out and the cover will prevent contamination (col. 4, lines 29-33) of the pad. While DeForest does not teaches using cover with a safety recess, it would have been obvious to one of ordinary skill in the art to use a cover with a safety recess so that in the event

that the cover is not removed from the cartridge during a cleaning process, the probe pins will not be damaged.

Response to Arguments

Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

The applicant amended claim 1 to include new limitations that were not previously considered. Additionally, new claims were added which also required further search and consideration.

The references of Baker, Masahiko and Huang are still being used to reject the independent claim since the newly added limitations of the claims still read on the present invention. It is noted that while the applicant is intending the present invention to be used for probe cleaning, the actual probes assemblies are not claimed and therefore, it is considered intended use. The claim language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Slb
7/28/06

GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER